

FIBER ORGANON

Volume 62, No. 9 □ September 1991

A publication of *Fiber Economics Bureau, Inc.*

MANUFACTURED FIBER, COTTON & WOOL END USE SURVEY

HIGHLIGHTS

- Annual Manufactured Fiber, Cotton and Wool End Use Survey.
- Manufactured Fiber & Semimanufactured Imports 1990 . . . see page 222.

This month's issue of the *Fiber Organon* contains our annual report of U.S. manufactured, cotton and wool fiber consumption by end use. This report is part of a continuing series covering fiber end use for the 42 years 1949-1990.

This survey is to measure the amount of raw manufactured, cotton and wool fiber required to produce the various end use items. Other fibers such as silk, linen, jute and sisal are used in the various products covered by the survey, but no quantity data for these fibers are included in the end uses.

Comparability With Past Data

Every year we report the most up-to-date information on fiber end use, which means previous data must sometimes be revised. Data in a series which has been revised will be denoted by an "r". Changes in definitions or coverage in an end use item are noted in the definitions.

For example, data on glass fiber are no longer available to prevent disclosure of company-level data. These data

were last reported in the September 1985 issue. There are new definitions for waste, apparel, home textiles and industrial and other consumer-type items.

The data in this survey may be used in conjunction with earlier issues of the *Textile Organon & Fiber Organon* as follows:

Years	<i>Textile Organon & Fiber Organon</i> Issues
1949-1955	November 1961
1956-1959	January 1966
1960-1963	January 1970
1964-1965	November 1971
1966-1967	November 1973
1968-1969	November 1975
1970	November 1976
1971-1972	November & December 1978
1973	November 1980
1974	November 1981
1975	November 1982
1976	November 1983
1977	September 1984
1978	September 1985
1979	September 1986
1983	September 1987
1984	September 1988
1985	September 1989
1986	September 1990

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TABLE 1:
U.S. FIBER CONSUMPTION BY END USE ^a

END USE	TOTAL FIBER								MANUFACTURED FIBER							
	MILLION POUNDS				% OF TOTAL END USE ^b				MILLION POUNDS				% OF TOTAL END USE ^b			
	1987	1988	1989	1990	1987	1988	1989	1990	1987	1988	1989*	1990*	1987	1988	1989	1990
APPAREL	5564	5164	5457	5333	40	38	39	38	2638	2512	2485	2187	29	27	27	24
HOME TEXTILES	2162	2052	2236	2097	16	15	16	15	912	954	927	895	10	10	10	10
FLOOR COVERINGS	2975	3050	2996	3068	21	23	21	22	2934	3017	2959	3029	32	32	32	33
INDUSTRIAL & OTHER																
CONS. - TYPE PROD	2806	2806	2825	2971	20	21	20	21	2419	2489	2504	2642	26	27	27	29
EXPORTS	406	456	492	532	3	3	4	4	264	313	337	364	3	4	4	4
TOTAL END USE	13913	13528	14006	14001	100	100	100	100	9167	9285	9212	9117	100	100	100	100

* FOR 1989 & 1990, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES FOR APPAREL, HOME TEXTILES, FLOOR COVERINGS AND INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

All data are drawn from the U.S. End Use Summary table on page 220

NOTE: Data on Glass Fiber is no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

a. Includes domestic shipments, fiber, yarn, fabric imports and waste

b. The percentages in these columns show the usage of each type of fiber by its major end use categories. They add to 100% vertically.

September 1991

Fiber Organon

A Monthly Review

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ISSN 0040-5132
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published monthly. All rights
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given.

Subscription Rates -
(payable in U.S. dollars with order):

ITEM	U.S.A.	OTHER
Annually (1 year only)	300.00	400.00
Schools & Nonprofit	150.00	400.00
Single Issues:		
May	100.00	150.00
June	200.00	250.00
September	150.00	200.00
December	100.00	150.00
All Others	50.00	75.00

Issues are sent by 1st class
mail to U.S. subscribers and by
airmail to foreign subscribers.

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SURVEY COVERAGE

Table Presentation

End use data are presented by type of fiber, manufactured, cotton and wool; by type of end use product; and by exports of domestic semimanufactured products. All data are in millions of pounds.

Table 1 shows both total and manufactured fiber consumption by end use for the years 1987, 1988, 1989 and 1990. In addition to the pounds of fiber consumed, the percentage of total end use is reported for five categories: apparel, home textiles, floor coverings, industrial and other consumer-type products and exports.

Table 2 presents greater fiber and annual detail than Table 1. Percentage distributions are given for both total end use and for individual end uses.

Tables 6 through 9 give further detail on each of the five end uses reported in Table 2, covering the same five year period 1986 - 1990. The major change in Tables 6-9 are: Home Textiles Item 51 is now "Curtains & Drapery", and Item 52 is "Upholstery" only (Table 7).

The substantial imports of finished products, such as apparel, blankets, tablecloths and rugs are not included in this survey as they are not manufactured in domestic mills.

Fibers Covered

The manufactured fiber data are presented in two general categories. Artificial (Cellulosic), which includes rayon and acetate, and Synthetic (Noncellulosic), which includes nylon, polyester, acrylic and olefin. Glass fiber is no longer included. See footnote (b) under General Notes on page 230 for additional descriptions. The cotton end use data cover raw cotton. Cotton waste and cotton linters quantities are excluded, except when pertaining to waste. See the section describing waste fiber coverage for further explanation. Wool data cover both virgin and reprocessed and reused wool.

SURVEY WASTE FIBER COVERAGE

In the survey, textile fiber waste is handled in three different ways: First, end uses which employ waste fiber, either wholly or in part without preliminary processing are not included (e.g., furniture stuffing, mat-

tress felts, punched or needled felts for carpet & rug underlays, pressed wool felts and some nonwoven fabrics).

Second, for certain end uses which utilize both new fiber and the fiber derived from processed waste, the quantities shown have been calculated so as to exclude the waste component inasmuch as possible.

And third, waste which has been processed into usable spinnable fiber is included in the quantities shown for Blankets (Item 46), Carpets & Rugs (Item 50) and a number of other applications. It is important to note that in products such as these, fiber derived from waste by preliminary processing, especially for the manufactured fiber quantities, is a significant and measured part of the total end use.

METHODOLOGY

COTTON: The cotton series presented in earlier issues were mainly those of the National Cotton Council as published in its annual survey "*Cotton Counts Its Customers*" (1989 and earlier editions).

With the 1989 issue we changed the methodology in using the bale opening figure from the Bureau of the Census Report M22P plus imports. *Cotton Counts Its Customers* is used as an indicator for the end use distribution.

WOOL: The Wool Bureau and government data are employed.

Blends of wool with other fibers are common in many end uses, but little information is available on the fiber composition of these blends. Thus, relatively reliable measures are available mainly on the wool quantities used in Home Textiles (blankets and carpets) and such Apparel items as Craft Yarns.

These quantities were deducted from the Available Supply in Table 3, page 221, and residual quantities were then attributed to Apparel Usage in individual apparel items from the years 1986 - 1990. This was calculated by correlating the data of Census reports MA-23A and MQ-22T on Apparel and Broad Woven Goods, respectively.

MANUFACTURED FIBERS: The manufactured fiber data are based on producers' domestic shipments plus imports of fiber, yarn and semimanufactured products.

Continued on Page 221

**TABLE 2:
U.S. END USE SUMMARY EXCLUDING GLASS FIBER
MILLION POUNDS & PERCENT**

END USE & YEAR													MANUFACTURED FIBER DETAIL									
	GRAND TOTAL			COTTON			WOOL			MANUFACTURED FIBERS			ARTIFICIAL (CELL.)				SYNTHETIC (NONCELL.)					
													TOTAL			YARN		STAPLE*	TOTAL			YARN
	LBS	% ^a	% ^b	LBS	% ^a	% ^b	LBS	% ^a	% ^b	LBS	% ^a	% ^b	LBS	% ^a	% ^b				LBS	LBS		
APPAREL																						
1986	5138	100	39.8	2343	45.6	59.5	158	3.1	73.5	2637	51.3	30.1	257	5.0	42.4	151	106	2380	46.3	29.2	1004	137
1987	5564	100	40.0	2769	49.8	61.3	157	2.8	69.5	2638	47.4	28.8	236	4.2	40.2	123	113	2402	43.2	28.0	979	1423
1988	5164	100	38.2	2513	48.7	62.3	139	2.7	66.2	2512	48.6	27.1	276	5.3	45.0	143	133	2236	43.3	25.8	879	1357
1989	5457	100	39.0	2834	52.0	61.8	138	2.5	65.7	2485	45.5	27.0	274	5.0	45.7	150	124	2211	40.5	25.7	890	1321
1990	5333	100	38.1	3028	56.8	64.4	118	2.2	63.8	2187	41.0	24.0	294	5.5	49.2	148	146	1893	35.5	22.2	741	1152
HOME TEXTILES																						
1986	2000	100	15.5	1082	54.1	27.5	18	0.9	8.4	900	45.0	10.3	131	6.6	21.6	17	114	769	38.4	9.4	245	524
1987	2162	100	15.5	1232	57.0	27.3	18	0.8	8.0	912	42.2	9.9	139	6.4	23.7	22	117	773	35.8	9.0	249	524
1988	2052	100	15.2	1079	52.6	26.8	19	0.9	9.0	954	46.5	10.3	130	6.3	21.2	21	109	824	40.2	9.5	271	553
1989	2236	100	18.0	1290	57.7	28.1	19	0.8	9.0	927	41.5	10.1	123	5.5	20.5	21	102	804	36.0	9.3	283	521
1990	2097	100	15.0	1188	56.6	25.3	14	0.7	7.6	895	42.7	9.8	104	5.0	17.4	23	81	791	37.7	9.3	280	511
FLOOR COVERINGS																						
1986	2799	100	21.7	15	0.5	0.4	17	0.6	7.9	2767	98.9	31.6	2	0.1	0.3	0	2	2765	98.8	33.9	1535	1230
1987	2975	100	21.4	18	0.6	0.4	23	0.8	10.2	2934	98.6	32.0	1	0	0.2	0	1	2933	98.6	34.2	1614	1319
1988	3050	100	22.5	12	0.4	0.3	21	0.7	10.0	3017	98.9	32.5	1	0	0.2	0	1	3016	98.9	34.8	1647	1369
1989	2996	100	21.4	13	0.4	0.3	24	0.8	11.4	2959	98.8	32.1	1	0	0.2	0	1	2958	98.8	34.3	1660	1298
1990	3068	100	21.9	18	0.6	0.4	21	0.7	11.4	3029	98.7	33.2	0	0	0	0	+	3029	98.7	35.6	1778 ^c	1251
INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS																						
1986	2601	100	20.1	357	13.7	9.1	13	0.5	6.0	2231	85.8	25.4	197	7.6	32.5	28	169	2034	78.2	24.9	1107	927
1987	2806	100	20.2	374	13.3	8.3	13	0.5	5.8	2419	86.2	26.4	189	6.7	32.2	22	167	2230	79.5	26.0	1185	1045
1988	2806	100	20.7	305	10.9	7.6	12	0.4	5.7	2489	88.7	26.8	181	6.5	29.5	21	160	2308	82.2	26.6	1238	1070
1989	2825	100	20.2	312	11.0	6.8	9	0.4	4.3	2504	88.6	27.2	175	6.2	29.2	26	149	2329	82.4	27.0	1266	1063
1990	2971	100	21.2	319	10.7	6.8	10	0.3	5.4	2642	89.0	29.0	171	5.8	28.6	8	163	2471	83.2	29.0	1300	1171
EXPORTS OF DOMESTIC PRODUCTS																						
1986	384	100	2.9	143	37.2	3.5	9	2.4	4.2	232	60.4	2.6	19	4.9	3.2	11	8	213	55.5	2.6	88	125
1987	406	100	2.9	127	31.3	2.7	15	3.7	6.5	264	65.0	2.9	22	5.4	3.7	13	9	242	59.6	2.8	100	142
1988	456	100	3.4	124	27.2	3.0	19	4.2	9.1	313	68.6	3.3	25	5.5	4.1	15	10	288	63.1	3.3	119	169
1989	492	100	3.4	135	27.4	3.0	20	4.1	9.5	337	68.5	3.6	27	5.5	4.4	16	11	310	63.0	3.7	128	182
1990	532	100	3.8	146	27.4	3.1	22	4.1	11.8	364	68.5	4.0	29	5.5	4.8	17	12	335	63.0	3.9	138	197
TOTAL END USE CONSUMPTION																						
1986	12922	100	100	3940	30.5	100	215	1.6	100	8767	67.9	100	606	4.7	100	207	399	8161	63.2	100	3979	4182
1987	13913	100	100	4520	32.5	100	226	1.6	100	9167	65.9	100	587	4.2	100	180	407	8580	61.7	100	4127	4453
1988	13528	100	100	4033	29.8	100	210	1.6	100	9285	68.6	100	613	4.5	100	200	413	8672	64.1	100	4154	4518
1989	14006	100	100	4584	32.7	100	210	1.5	100	9212	65.8	100	600	4.3	100	213	387	8612	61.5	100	4227	4385
1990	14001	100	100	4699	33.6	100	185	1.3	100	9117	65.1	100	598	4.3	100	196	402	8519	60.8	100	4237	4283

* FOR 1989 & 1990, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES FOR APPAREL, HOME TEXTILES, FLOOR COVERINGS AND INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

a. The percentages in these columns show the share of each fiber in the specified end use each year. They add horizontally to the 100% shown in each of the Grand Total columns.

b. The percentages in these columns show the usage of each type of fiber by its major end use categories. They add vertically to the 100% shown under Total End Use Consumption.

c. The increase in yarns for floor coverings is due to a more thorough response and not because of increased consumption.

TABLE 3:
END USE CONSUMPTION INCLUDING SEMIMANUFACTURED IMPORTS^a
MILLION POUNDS

YEAR	MANUFACTURED FIBERS										COTTON				WOOL				AVAIL- ABLE SUPPLY								
	MILL CONSUMPTION					SYNTHETIC (NONCELLULOSIC)					MILL CONS. ^a		IMPORTS ^c		TOTAL		MILL CONS. ^a			REPRO- CESSED & REUSED ^d		COTTON SYSTEM ^d		IMPORTS ^c		TOTAL	
	ARTIFICIAL (CELLULOSIC)		TOTAL																								
	YARN	STAPLE ^b	TOTAL	YARN	STAPLE ^b																						
	1986	209.1	399.2	608.3	3747.3	4098.3	7845.6	341.3	8795.2	3301.7	638.8	3301.7	638.8	3940.5	164.5	9.5	8.5	39.6		226.1	12957.8						
1987	179.6	406.0	585.6	3927.1	4349.0	8276.1	303.6	9165.3	3736.5	784.4	3736.5	784.4	4520.9	167.6	7.9	6.9	44.1	225.5	13912.7								
1988	200.2	412.2	612.4	4045.9	4359.1	8405.0	273.3	9290.7	3470.1	561.9	3470.1	561.9	4032.0	156.1	3.8	6.8	43.0	209.7	13532.4								
1989	213.6	387.3	600.9	4094.2	4314.7	8408.9	*286.4	9296.2	3937.1	*646.2	3937.1	*646.2	4583.3	153.9	4.5	13.8	*38.0	210.2	14089.7								
1990	196.9	402.0	598.9	4143.3	4094.8	8238.1	*290.0	9127.0	4036.5	*662.2	4036.5	*662.2	4698.7	135.4	5.0	10.9	*33.4	184.7	14010.4								

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

^a Preliminary estimates.

^b Mill Consumption is taken from page 69 of the April 1991 *Fiber Organon*, plus subsequent revisions.

^c Manufactured staple includes waste.

^d Imports are taken from page 55 of the March 1991 *Fiber Organon*.

^e These volumes of reprocessed and reused wool, as well as wool used on the cotton spinning system, are not included in the mill consumption series for wool.

^f Semimanufactured imports are taken from page 222 of this issue.

Continued From Page 219

UNIT PRODUCTION VERSUS FIBER CONSUMED

This survey shows the quantity of raw fiber which had to be put into process in order to manufacture end products. No direct comparison can be, or should be, made between the quantities of the fibers consumed, as recorded in the survey, and the finished or "shell" weight of those end products by fiber. Comparison should be avoided because:

1. The variation in the weight per square yard of fabric made of the different fibers for the same end use. According to recent data collected by the U.S. Census Bureau, cotton fabrics averaged 7.0 square yards per pound and wool 0.6 square

yards per pound. But for manufactured fiber, 100% filament yarn fabrics averaged 4.4 square yards per pound and spun yarn fabrics averaged 3.3 square yards per pound.

2. From these data, it is apparent that the "covering power" of fabrics made from the various fibers varies a great deal. Hence, a simple comparison of quantities of fibers consumed would be misleading both because of the differences in fibers concerning covering power and the difference in typical fabric weights of products made of the various fibers, as described.

Continued On Page 226

TABLE 4:
MANUFACTURED FIBER & SEMIMANUFACTURED IMPORTS
MILLION POUNDS

ITEM	1989	1990
ARTIFICIAL (CELLULOSIC) FIBER		
FILAMENT YARN		
HIGH TENACITY	2.5	2.4
TEXTURED	1.4	0.4
OTHER	21.4	20.7
MONOFILAMENTS & STRIPS	1.0	0.7
SUBTOTAL ABOVE	26.3	24.2
STAPLE	53.1	106.1
TOW	0.8	5.5
TOPS	0.1	+
SUBTOTAL ABOVE	54.0	111.6
WASTE	0.6	0.5
SYNTHETIC (NONCELLULOSIC) FIBERS		
FILAMENT YARN		
NYLON		
HIGH TENACITY	19.5	15.2
TEXTURED		
UP TO 450 DENIER	3.5	3.6
OVER 450 DENIER	14.1	28.3
POY	0	11.8
OTHER	47.2	21.8
MONOFILAMENTS & STRIPS	1.3	1.6
SUBTOTAL ABOVE	85.6	82.3
POLYESTER		
HIGH TENACITY	7.8	6.0
TEXTURED	19.0	10.6
POY	16.3	4.8
OTHER	18.9	19.9
MONOFILAMENTS & STRIPS	0.7	0.6
SUBTOTAL ABOVE	62.7	41.9
OTHER SYNTHETIC FILAMENT		
TEXTURED	19.2	20.5
OTHER	7.8	3.4
MONOFILAMENTS & STRIPS	6.9	6.6
SUBTOTAL ABOVE	33.9	30.5
STAPLE		
NYLON	21.7	35.9
POLYESTER	117.7	122.2
ACRYLIC	17.9	16.7
POLYPROPYLENE	2.1	1.6
OTHER	4.4	3.2
TOW		
NYLON	4.5	5.3
POLYESTER	0.9	0.9
ACRYLIC	19.6	21.2
OTHER	0.6	0.6
TOPS	3.0	2.2
SUBTOTAL ABOVE	192.4	209.8
WASTE		
NYLON	24.0	21.3
POLYESTER	17.0	24.5
OTHER	7.0	8.6
TOTAL MANUFACTURED FIBERS ABOVE	503.5	555.2
SEMIMANUFACTURES ^a		
SLIVER, TOPS & ROVING	4.6	4.6
YARNS, THROWN OR PLIED	12.7	14.8
SPUN YARNS	48.8	23.4
SEWING THREAD	6.5	6.7
WOVEN FABRICS	186.4	197.1
NARROW FABRICS	15.4	20.7
KNIT FABRIC	12.0	22.7
TOTAL SEMIMANUFACTURES ABOVE	286.4	290.0
GRAND TOTAL ABOVE	789.9	845.2

SOURCES: U.S. Census Bureau Report IM146; U.S. Department of Agriculture, *Cotton & Wool Situation and Outlook Report*.

Effective January 1, 1989 the U.S. Imports are based on the new Harmonized System (HS). The Harmonized Tariff Schedule of the United States covering artificial (cellulosic) and synthetic (noncellulosic) fibers. Annotated for Statistical Reporting Purposes. **Data for 1989 & 1990 are not comparable to prior years.** Data for 1984 through 1988 are reported on page 206 of the September 1989 *Fiber Organon* issue.

a. Preliminary.

**TABLE 5:
EXPORTS OF SEMIMANUFACTURED PRODUCTS ^a
MILLION POUNDS**

END USE & YEAR		TOTAL FIBER	MANUFACTURED FIBERS ^b				COTTON	WOOL	
			TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
				YARN	STAPLE	YARN			STAPLE
TOTAL EXPORTS OF SEMIMANUFACTURED PRODUCTS									
1986	383.7	232.1	11.0	7.6	88.0	125.5	143.0	8.6	
1987	405.6	263.8	12.5	8.6	100.3	142.4	126.9	14.9	
1988	455.0	312.6	14.7	10.3	118.8	168.8	123.8	18.6	
1989	492.6	337.6	15.9	11.1	128.3	182.3	134.9	20.1	
1990	532.3	364.6	17.1	12.1	138.5	196.9	146.0	21.7	
80 YARN, THREAD, ETC*									
1986	70.8	47.9	e	2.5	e	45.4	16.6	6.3	
1987	86.2	53.9	e	2.8	e	51.1	19.6	12.7	
1988	110.2	66.5	e	3.5	e	63.0	27.2	16.5	
1989	117.7	70.2	e	3.8	e	66.4	29.7	17.8	
1990	127.1	75.8	e	4.1	e	71.7	32.1	19.2	
81 WOVEN & KNIT FABRIC*									
1986	312.9	184.2	11.0	5.1	88.0	80.1	126.4	2.3	
1987	319.4	209.9	12.5	5.8	100.3	91.3	107.3	2.2	
1988	344.8	246.1	14.7	6.8	118.8	105.8	96.6	2.1	
1989	374.9	267.4	15.9	7.3	128.3	115.9	105.2	2.3	
1990	405.2	288.8	17.1	8.0	138.5	125.2	113.9	2.5	

SOURCE: U.S. Department of Agriculture, *Cotton & Wool Situation and Outlook Report*.

For all lettered and general footnotes to this table, see page 230.

1989 & 1990 PRELIMINARY ESTIMATES.

This is a non-add section since the volumes are included in Tables 2 and 6 through 9.

NOTES FOR EXPORT ITEMS ABOVE

For all lettered and general footnotes to this table, see page 230.

These exports do not duplicate the end use quantities that are reported in Items 1 through 79. Apparel items are not tabulated here because they already have been counted as the fabric was cut, i.e., they are counted only once regardless of the subsequent place of sale or consumer use.

Similarly, fabrics for blankets, sheets, upholstery & draperies, carpets, etc., are excluded since they are measured at the mill level as an end use.

The exports of manufactured fiber filament yarn+monofilaments, staple, tow, etc., are not tabulated in this section because these products are not a factor in U.S.

mill consumption.

On the other hand, the two export items are recorded because, while they were processed or fabricated in U.S. mills, they were exported before reaching the point at which end use is measured.

80. YARN, THREAD, ETC:

Consists of sliver, tops & roving; plied and spun yarn; sewing thread and handwork yarns; cotton twine and cordage; and advanced wool.

81. WOVEN & KNIT FABRIC:

Consists of broad & narrow woven fabrics and knit cloth, except that cotton also includes table damask and tire cord & fabric.

TABLE 6:
FIBER CONSUMED IN U.S. APPAREL PRODUCTION INCLUDING FIBER, YARN,
FABRIC IMPORTS & WASTE ^a
MILLION POUNDS

MILLION POUNDS								
END USE & YEAR	TOTAL FIBER	TOTAL	MANUFACTURED FIBERS ^b				COTTON	WOOL
			ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
TOTAL APPAREL								
1986	5137.7	2636.4	150.8	105.5	1003.7	1376.4	2342.7	158.6
1987	5563.4	2637.5	123.4	112.8	978.8	1422.5	2769.2	156.7
1988	r5163.4	2511.8	143.5	133.0	879.0	1356.3	r2512.8	138.8
1989	r5456.6	2485.4	150.1	124.1	890.2	1321.0	r2833.6	137.6
1990	5333.1	2187.6	148.0	146.3	740.8	1152.5	3027.5	118.0
40 SHEER HOSIERY (W)*								
1986	91.0	87.2	--	--	87.2	--	3.8	--
1987	95.4	91.3	--	--	91.3	--	4.1	--
1988	r97.7	93.8	--	--	93.8	--	r3.9	--
1989	r108.2	103.9	--	--	103.9	--	r4.3	--
1990	102.1	97.9	--	--	97.9	--	4.2	--
19,41 ANKLETS & SOCKS (MW)*								
1986	210.8	127.7	c	0.4	57.3	70.0	79.3	3.8
1987	224.5	112.8	c	0.4	59.0	53.4	107.9	3.8
1988	r215.9	106.0	0.1	0.3	58.6	47.0	r106.5	3.4
1989	r255.7	120.7	c	0.2	77.8	42.7	r131.7	3.3
1990	245.4	118.5	0.3	0.2	82.2	35.8	124.1	2.8
8,29 SWEATERS & RELATED ACCESSORIES								
1986	274.9	164.0	--	1.5	0.4	162.1	91.9	19.0
1987	257.8	155.6	--	0.3	0.3	155.0	82.9	19.3
1988	r211.5	140.9	0.1	0.1	0.4	140.3	r55.6	15.0
1989	r206.4	140.0	--	0.1	0.1	139.8	r51.8	14.6
1990	162.1	99.1	--	0.1	0.1	98.9	50.5	12.5
57 CRAFT & HANDWORK YARNS*								
1986	91.2	82.4	1.2	0.2	c	81.0	4.8	4.0
1987	80.6	72.0	0.9	0.2	c	70.9	4.6	4.0
1988	r74.5	67.6	1.1	0.2	--	66.3	r3.8	3.1
1989	r71.7	64.9	0.9	0.2	--	63.8	r4.6	2.2
1990	65.0	57.8	0.3	--	--	57.5	5.3	1.9
16-18 UNDERWEAR & NIGHTWEAR (M)*								
1986	320.8	108.8	--	--	12.5	96.3	211.8	0.2
1987	356.9	100.0	--	--	10.5	89.5	256.7	0.2
1988	r321.8-	84.8	--	--	8.7	76.1	r236.8	0.2
1989	r330.7	79.7	--	--	7.6	72.1	r250.8	0.2
1990	353.8	80.7	--	--	10.4	70.3	272.9	0.2
35-39 UNDERWEAR, NIGHTWEAR, BRAS AND FOUNDATIONS (W)*								
1986	194.0	128.9	8.0	--	94.8	26.1	64.9	0.2
1987	204.8	123.7	1.9	--	92.0	29.8	80.9	0.2
1988	r200.0	125.2	2.9	--	88.3	34.0	r74.6	0.2
1989	r236.4	153.1	5.4	--	94.2	53.5	r83.1	0.2
1990	203.2	112.0	5.5	--	66.7	39.8	91.0	0.2
10,31 ROBES & LOUNGEWEAR (MW)*								
1986	93.1	73.8	31.2	--	23.5	19.1	17.0	2.3
1987	89.9	61.7	19.7	--	22.9	19.1	25.9	2.3
1988	r86.3	63.9	19.3	--	27.9	16.7	r20.1	2.3
1989	r97.0	72.4	16.2	--	35.0	21.2	r22.4	2.2
1990	68.2	44.9	7.3	--	21.0	16.6	21.4	1.9

TABLE 6:
FIBER CONSUMED IN U.S. APPAREL PRODUCTION INCLUDING FIBER, YARN,
FABRIC IMPORTS & WASTE * (CONTINUED)
MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS ^b					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
54a HIGH PILE FABRICS								
1986	59.0	59.0	--	--	10.6	48.4	--	--
1987	67.9	67.9	--	2.0	15.4	50.5	--	--
1988	54.2	54.2	--	--	8.3	45.9	--	--
1989	54.7	54.7	4.0	--	8.9	41.8	--	--
1990	47.0	47.0	--	--	10.9	36.1	--	--
54b FABRICS FOR LINING*								
1986	179.3	133.9	98.3	3.6	18.5	13.5	42.6	2.8
1987	181.6	136.1	90.4	5.8	23.6	16.3	42.6	2.9
1988	r176.7	139.1	104.1	6.5	18.3	10.2	r34.9	2.7
1989	r167.5	129.9	95.7	6.1	20.8	7.3	r35.1	2.5
1990	149.5	110.7	74.8	4.4	21.4	10.1	36.7	2.1
43 APPAREL LACE (W)*								
1986	4.3	2.8	--	--	2.8	--	1.5	--
1987	3.9	2.4	0.3	--	2.1	--	1.5	--
1988	4.6	3.1	--	--	3.1	--	1.5	--
1989	7.7	6.2	--	--	6.2	--	1.5	--
1990	4.4	2.9	--	--	2.9	--	1.5	--
56a NARROW FABRICS*								
1986	59.9	35.1	2.1	--	30.1	2.9	24.8	--
1987	77.7	51.6	2.2	--	46.4	3.0	26.1	--
1988	78.5	51.7	2.6	--	46.4	2.7	26.8	--
1989	89.3	62.4	4.3	--	56.2	1.9	26.9	--
1990	80.2	50.1	3.2	--	46.9	--	30.1	--
TOPWEIGHT FABRICS*								
1986	1209.4	579.5	7.5	55.4	148.2	368.4	626.3	3.6
1987	1489.8	718.7	5.6	49.3	127.5	536.3	767.4	3.7
1988	r1490.8	724.1	5.8	55.5	130.1	532.7	r763.3	3.4
1989	r1664.7	729.2	11.3	51.7	149.4	516.8	r932.2	3.3
1990	1683.2	650.5	13.4	78.8	101.9	456.4	1029.9	2.8
BOTTOMWEIGHT FABRICS*								
1986	2294.2	1044.7	2.5	43.9	514.4	483.9	1126.8	122.7
1987	2370.2	934.9	2.4	53.3	484.5	394.7	1315.0	120.3
1988	r2112.1	839.2	2.5	66.9	391.5	378.3	r1164.4	108.5
1989	r2121.7	749.9	1.3	62.4	326.6	359.6	r1262.7	109.1
1990	2092.4	667.4	1.4	60.5	274.9	330.6	1331.4	93.6
OTHER APPAREL & ACCESSORIES (MW)*								
1986	55.8	8.6	--	0.5	3.4	4.7	47.2	c
1987	62.4	8.8	--	1.5	3.3	4.0	53.6	c
1988	r38.8	18.2	5.0	3.5	3.6	6.1	r20.6	c
1989	r44.9	18.4	11.0	3.4	3.5	0.5	r26.5	c
1990	76.6	48.1	41.8	2.3	3.6	0.4	28.5	c

* FOR 1989 & 1990, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

Most of the above data are taken from the Fiber Economics Bureau's publication *Manufactured Fiber Handbook*.

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

For all lettered and general footnotes to this table and the Home Textiles, Floor Covering and Industrial & Other Consumer-Type Products tables, please see page 230.

TABLE 7:
FIBER CONSUMED IN U.S. HOME TEXTILES PRODUCTION INCLUDING FIBER, YARN,
FABRIC IMPORTS & WASTE EXCLUDING FLOOR COVERINGS^a
MILLION POUNDS

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS ^b						COTTON	WOOL	
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)					
			YARN	STAPLE*	YARN	STAPLE				
TOTAL HOME TEXTILES										
1986	1999.7	900.0	16.8	113.9	244.9	524.4	1082.1	17.6		
1987	2162.3	912.3	21.8	117.2	248.8	524.5	1232.0	18.0		
1988	r2051.5	953.8	20.8	108.8	270.6	553.6	r1078.6	19.1		
1989	r2236.1	927.1	20.9	101.5	283.2	521.5	r1290.0	19.0		
1990	2097.0	894.9	22.9	80.8	280.4	510.8	1188.3	13.8		
45 BEDSREADS & QUILTS*										
1986	146.6	80.0	0.2	6.3	19.1	54.6	66.6	--		
1987	178.8	93.8	--	3.3	20.5	70.0	85.0	--		
1988	r189.9	109.7	0.2	--	29.0	80.7	r80.2	--		
1989	r155.5	72.7	--	--	21.9	50.8	r82.8	--		
1990	160.0	71.6	--	--	21.7	49.9	88.4	--		
46 BLANKETS & BLANKETING*										
1986	77.0	51.1	--	0.2	--	50.9	21.6	4.3		
1987	80.6	51.8	--	0.2	--	51.6	24.7	4.1		
1988	r73.0	43.5	--	0.2	--	43.3	r25.3	4.2		
1989	r84.5	48.7	--	0.2	--	48.5	r30.5	5.3		
1990	70.5	31.6	--	--	--	31.6	35.0	3.9		
47 SHEETS & OTHER BEDDING*										
1986	520.3	254.8	1.9	12.7	70.1	170.1	265.5	--		
1987	520.2	235.2	1.5	7.2	59.7	166.8	285.0	--		
1988	r496.5	239.0	0.4	6.2	60.8	172.0	r257.5	--		
1989	r513.5	228.5	--	5.8	48.0	174.7	r285.0	--		
1990	528.0	226.4	--	4.4	51.8	170.2	301.6	--		
48 TOWELS & TOWELING*										
1986	500.6	31.9	--	0.5	0.2	31.2	468.7	--		
1987	556.4	34.2	--	0.1	0.5	33.6	522.2	--		
1988	r457.9	36.7	--	0.2	0.5	36.0	r421.2	--		
1989	r587.3	26.6	--	0.2	--	26.4	r560.7	--		
1990	423.5	19.4	--	0.1	0.2	19.1	404.1	--		
56b NARROW FABRICS*										
1986	4.1	0.3	--	--	0.2	0.1	3.8	--		
1987	6.2	2.2	--	--	1.7	0.5	4.0	--		
1988	6.0	2.0	--	--	1.8	0.2	4.0	--		
1989	7.5	3.5	--	--	0.1	3.4	4.0	--		
1990	4.0	0	--	--	--	--	4.0	--		

Continued From Page 221

LIMITATIONS OF THE SURVEY RESULTS

The statistical results of this end use survey should be considered as approximations. These data are best used as a means of comparison to measure the long-term trends among the fibers.

Please note that the data are given in millions of pounds and include one decimal place to show hundred thousand pounds. This device is employed not to show great accuracy, but rather to take into account some small quantities of fibers in such end uses as Apparel Lace and still allow the compilation to add arithmetically.

TABLE 7:
FIBER CONSUMED IN U.S. HOME TEXTILES PRODUCTION INCLUDING FIBER, YARN,
FABRIC IMPORTS & WASTE EXCLUDING FLOOR COVERINGS ^a (CONTINUED)
MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS ^b					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
51 CURTAINS & DRAPERY*								
1986	277.8	190.2	14.3	48.9	45.2	81.8	87.6	--
1987	273.8	163.1	19.7	52.2	42.5	48.7	110.7	--
1988	r259.9	161.9	19.9	49.9	50.4	61.6	r98.0	--
1989	r291.1	170.3	17.0	46.6	60.2	63.5	r120.8	--
1990	302.1	162.6	18.5	38.2	55.5	68.9	139.5	--
52 UPHOLSTERY*								
1986	390.6	229.3	0.4	44.3	92.0	92.6	148.0	13.3
1987	464.7	269.2	0.1	53.2	93.0	122.9	181.6	13.9
1988	r450.4	259.8	--	48.7	86.3	124.8	r175.7	14.9
1989	r476.1	273.6	0.8	45.5	109.7	118.4	r188.8	13.7
1990	468.1	261.2	--	34.5	121.8	104.9	197.0	9.9
OTHER HOME TEXTILES*								
1986	82.5	62.2	--	1.0	18.1	43.1	20.3	--
1987	81.6	62.8	0.5	1.0	30.9	30.4	18.8	--
1988	r97.1	80.4	0.3	3.6	41.8	35.0	r16.7	--
1989	r99.7	82.3	3.1	3.2	43.3	35.8	r17.4	--
1990	117.9	99.2	4.4	3.6	29.4	66.2	18.7	--

TABLE 8:
FIBER CONSUMED IN U.S. FLOOR COVERINGS PRODUCTION INCLUDING FIBER, YARN,
FABRIC IMPORTS & WASTE ^a
MILLION POUNDS

END USE & YEAR		TOTAL FIBER	MANUFACTURED FIBERS ^b				COTTON	WOOL	
			TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
				YARN	STAPLE*	YARN			STAPLE
50 TOTAL CARPETS & RUGS*									
1986	2799.7	2767.0	--	1.5	1535.2	1230.3	15.3	17.4	
1987	2974.7	2933.6	--	0.8	1613.7	1319.1	17.6	23.5	
1988	r3050.2	3016.9	--	0.9	1646.9	1369.1	r11.7	21.6	
1989	r2996.6	2958.8	--	1.1	1659.7	1298.0	r13.3	24.5	
1990	3068.5	3029.3	--	0.3	1778.2	1250.8	18.2	21.0	
50a FACE YARNS*									
1986	2305.0	2277.9	--	1.5	1131.1	1145.3	9.7	17.4	
1987	2462.0	2429.3	--	0.8	1188.4	1240.1	9.2	23.5	
1988	r2525.2	2497.7	--	0.9	1219.9	1276.9	r5.9	21.6	
1989	r2429.3	2399.2	--	1.1	1196.3	1201.8	r5.6	24.5	
1990	2518.1	2489.3	--	0.3	1330.7 ^f	1158.3	7.8	21.0	
50b BACKING*									
1986	494.7	489.1	--	--	404.1	85.0	5.6	--	
1987	512.7	504.3	--	--	425.3	79.0	8.4	--	
1988	r525.0	519.2	--	--	427.0	92.2	r5.8	--	
1989	r567.3	559.6	--	--	463.4	96.2	r7.7	--	
1990	550.4	540.0	--	--	447.5	92.5	10.4	--	

FOOTNOTES FOR BOTH TABLE 7 & TABLE 8:

^{*} FOR 1989 & 1990, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

Most of the above data are taken from the Fiber Economic Bureau's publication **Manufactured Fiber Handbook**.

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

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TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS
INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE ^a
MILLION POUNDS

END USE & YEAR		TOTAL FIBER	MANUFACTURED FIBERS ^b				COTTON	WOOL	
			TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
				YARN	STAPLE*	YARN			STAPLE
TOTAL INDUSTRIAL & OTHER CONSUMER									
1986	2601.4	2231.1	28.1	169.3	1107.0	926.7	356.9	13.4	
1987	2805.9	2418.5	22.0	166.6	1185.2	1044.7	374.0	13.4	
1988	r2806.7	2489.4	21.0	160.0	1238.6	1069.8	r305.1	12.2	
1989	r2824.1	2503.6	25.6	149.3	1265.8	1062.9	r311.5	9.0	
1990	2971.0	2642.1	8.2	163.2	1300.0	1170.7	318.7	10.2	
65 TIRES*									
1986	300.1	297.6	9.0	--	288.6	--	2.5	--	
1987	316.6	313.9	8.1	--	305.8	--	2.7	--	
1988	r312.5	309.9	5.9	--	304.0	--	r2.6	--	
1989	315.5	312.6	6.0	--	306.6	--	2.9	--	
1990	303.9	300.8	2.8	--	298.0	--	3.1	--	
66 HOSE*									
1986	30.4	27.6	11.0	--	15.9	0.7	2.8	--	
1987	30.2	27.5	9.4	--	17.2	0.9	2.7	--	
1988	r34.0	31.3	8.4	--	17.7	5.2	r2.7	--	
1989	r34.7	32.7	7.1	--	21.9	3.7	r2.0	--	
1990	32.4	30.7	2.3	--	25.0	3.4	1.7	--	
67 BELTING*									
1986	41.7	31.1	3.1	--	23.3	4.7	10.6	--	
1987	46.7	37.0	2.5	--	26.6	7.9	9.7	--	
1988	r50.4	41.6	1.6	--	24.3	15.7	r8.8	--	
1989	r58.0	48.9	2.2	--	34.3	12.4	r9.1	--	
1990	52.2	41.0	--	--	32.5	8.5	11.2	--	
61 MEDICAL, SURGICAL & SANITARY*									
1986	457.8	371.2	--	116.8	94.4	160.0	86.6	--	
1987	454.6	369.1	--	75.5	102.4	191.2	85.5	--	
1988	r451.5	382.1	--	85.1	117.2	179.8	r69.4	--	
1989	r454.5	377.9	c	78.1	120.3	179.5	r76.6	--	
1990	560.0	477.5	0.9	78.3	191.4	206.9	82.5	--	
79b UNALLOCATED NONWOVENS*									
1986	149.5	149.5	--	14.9	--	134.6	--	--	
1987	223.6	223.6	--	50.5	--	173.1	--	--	
1988	257.9	257.9	--	46.7	--	211.2	--	--	
1989	265.4	265.4	--	43.6	--	221.8	--	--	
1990	243.1	243.1	--	51.6	--	191.5	--	--	
79a FIBERFILL, STUFFING & FLOCK*									
1986	368.7	368.7	--	3.1	--	365.6	--	--	
1987	403.8	403.8	--	0.4	--	403.4	--	--	
1988	420.1	420.1	--	1.7	--	418.4	--	--	
1989	418.7	418.7	--	1.6	--	417.1	--	--	
1990	447.4	447.4	--	0.9	--	446.5	--	--	
70 FELTS*									
1986	25.0	11.7	--	2.2	4.3	5.2	1.0	12.3	
1987	20.4	7.1	--	3.2	3.9	8.1	1.0	12.3	
1988	r17.5	5.4	--	1.6	3.8	8.9	r0.9	11.2	
1989	27.1	18.1	--	1.5	3.2	13.4	1.0	8.0	
1990	29.1	18.9	--	1.2	2.9	14.8	1.1	9.1	
71 FILTRATION*									
1986	38.4	32.7	--	4.6	4.1	24.0	5.7	--	
1987	34.5	28.3	--	8.3	3.5	16.5	6.2	--	
1988	r33.3	30.4	--	4.1	3.6	22.7	r2.9	--	
1989	r33.8	31.2	--	3.9	3.2	24.1	r2.6	--	
1990	30.9	28.3	--	4.0	3.0	21.3	2.6	--	

For all lettered and general footnotes to this table and the Apparel, Home Textiles and Floor Covering tables, please see page 230

TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS
INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE ^a (CONTINUED)
MILLION POUNDS

MILLION POUNDS									
END USE & YEAR		TOTAL FIBER	MANUFACTURED FIBERS ^b				COTTON	WOOL	
			TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
				YARN	STAPLE*	YARN			STAPLE
73 ROPE, CORDAGE, FISHLINE, ETC*									
	1986	189.8	175.1	0.4	1.7	155.7	17.3	14.7	--
	1987	192.7	167.9	0.9	0.5	158.0	8.5	24.8	--
	1988	r178.8	159.0	0.6	0.1	153.9	4.4	r19.8	--
	1989	r195.9	177.1	0.6	0.1	174.1	2.3	r18.8	--
	1990	200.6	180.8	--	--	175.1	5.7	19.8	--
72 SEWING THREAD*									
	1986	129.6	84.6	0.4	3.9	63.5	16.8	45.0	--
	1987	140.2	94.9	0.4	4.1	69.4	21.0	45.3	--
	1988	r150.0	113.5	0.3	1.9	91.0	20.3	r36.5	--
	1989	r140.8	102.0	0.4	1.8	78.1	21.7	r38.8	--
	1990	136.9	94.0	0.2	1.5	74.0	18.3	42.9	--
76 PAPER & TAPE REINFORCING*									
	1986	5.5	3.4	0.9	0.1	2.4	c	2.1	--
	1987	7.0	4.7	0.7	0.7	2.5	0.8	2.3	--
	1988	r6.4	4.5	0.4	--	1.2	2.9	r1.9	--
	1989	r6.4	4.3	1.5	--	0.6	2.2	r2.1	--
	1990	5.7	3.7	0.6	0.2	0.2	2.7	2.0	--
69,77 ELECTRICAL & REINFORCED PLASTICS*									
	1986	29.1	4.1	c	--	3.9	0.2	25.0	--
	1987	30.4	5.4	c	0.4	4.2	0.8	25.0	--
	1988	31.6	6.6	c	1.3	4.2	1.1	25.0	--
	1989	40.5	15.5	--	1.2	13.3	1.0	25.0	--
	1990	42.5	17.5	--	0.9	16.1	0.5	25.0	--
75 COATED & PROTECTIVE FABRICS*									
	1986	197.2	136.2	--	11.6	47.0	77.6	61.0	--
	1987	182.7	119.5	--	3.8	57.2	58.5	63.2	--
	1988	r157.2	105.7	--	3.0	56.1	46.6	r51.5	--
	1989	r208.1	158.8	--	2.8	82.0	74.0	r49.3	--
	1990	211.4	163.9	--	2.6	73.1	88.2	47.5	--
63-64 TRANSPORTATION FABRIC*									
	1986	83.7	72.4	--	1.0	50.5	20.9	11.3	--
	1987	98.7	86.9	--	0.8	53.5	32.6	11.8	--
	1988	r106.7	97.3	--	7.6	48.2	41.5	r9.4	--
	1989	r117.0	107.5	--	7.2	43.7	56.6	r9.5	--
	1990	95.5	87.4	--	5.3	41.9	40.2	8.1	--
56c NARROW FABRICS*									
	1986	122.8	105.3	--	--	105.3	--	17.5	--
	1987	122.3	104.1	--	--	104.1	--	18.2	--
	1988	129.9	112.1	--	--	111.4	0.7	17.8	--
	1989	123.7	105.5	0.1	--	104.4	1.0	18.2	--
	1990	133.5	115.0	--	--	111.6	3.4	18.5	--
74 BAGS & BAGGING*									
	1986	58.3	53.0	--	--	52.2	0.8	5.3	--
	1987	62.9	57.6	--	0.3	54.8	2.5	5.3	--
	1988	62.1	58.3	0.1	0.1	57.6	0.5	3.8	--
	1989	r54.4	50.4	--	0.1	50.0	0.3	r4.0	--
	1990	52.9	48.8	--	0.1	48.4	0.3	4.1	--
MISCELLANEOUS INDUSTRIAL & CONSUMER-TYPE PRODUCTS*									
	1986	373.8	306.9	3.3	9.4	195.9	98.3	65.8	1.1
	1987	430.5	359.1	--	18.1	222.1	118.9	70.3	1.1
	1988	r397.9	344.8	3.7	6.8	244.4	89.9	r52.1	1.0
	1989	r329.6	277.0	7.7	7.4	230.1	31.8	r51.6	1.0
	1990	393.0	343.3	1.4	16.6	206.8	118.5	48.6	1.1

* FOR 1989 & 1990, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

Most of the above data are taken from the Fiber Economics Bureau's publication
Manufactured Fiber Handbook.

NOTE: Data on Glass Fiber are no longer available due to company disclosure.
The series including Glass Fiber was last published in the September
1985 issue

GENERAL NOTES FOR END USE TABLES
ON PAGES 223-229

Units are in million pounds.

- - Little, or none, of the fiber is used.
- * When an asterisk appears, there is a footnote at the end of the table.
- a. This letter in the title of each table refers the reader to these notes.
- b. Manufactured fiber end use in these tables is divided between Artificial (Cellulosic), (rayon+acetate fibers) and Synthetic (Noncellulosic), (nylon, polyester, acrylic & olefin fiber). Yarn includes monofilaments and olefin "yarn" also includes film fiber and spunbonded polypropylene. Staple includes tow & fiberfill; see Item 79a, Fiberfill, Stuffing & Flock and its footnote on page 232. Certain waste quantities, which are tabulated with staple, are included; see text on page 219.

The synthetic (noncellulosic) fibers included in this survey, for one or more years, are the acrylic, modacrylic,

nylon, olefin (polyethylene & polypropylene), polyester fibers through 1990. 1987- 1990 exclude vinyon fiber.

- c. Less than 50,000 pounds, i.e., nominal.
- d. The staple data are tabulated in the yarn column.
- e. The yarn data are tabulated in the staple column.
- f. The increase in yarns for floor coverings is due to a more thorough response and not because of increased consumption.
- r. This data shows a significant revision compared with the September 1990 *Fiber Organon* data.

As described in the footnotes to Items 54a and 54b, apparel linings, pockets and such are tabulated in Items 54a and 54b and not with the applicable garments.

In the Apparel table, the sex and age classifications used are those of the U.S. Census Bureau. Thus **M** means Men's plus Boys' and **W** means all other persons, i.e., Women's, Misses', Juniors', Girls', Children's & Infants'.

NOTES FOR APPAREL ITEMS
PAGES 224-225

For all lettered and general footnotes to this table, see notes above.

- 40. **SHEER HOSIERY:**
Includes pantyhose, stockings, body stockings, leotards & tights, sheer knee-highs & anklets and support hose.
- 19,41. **ANKLETS & SOCKS:**
Include footsocks, anklets, half-hose, over-the-calf hosiery and nonsheer knee-highs for all ages and both sexes. Also includes infants' and children's waist-highs.
- 8,29. **SWEATERS (MW):**
Knitted sweater shirts, scarves, mufflers, gloves, mittens, caps, etc. Pullover, coat & cardigan types, full-fashioned and cut and sewn. Also note Item 57.
- 57. **CRAFT & HANDWORK YARNS:**
All yarns for handwork, i.e., knitting, embroidery, crochet-ing, needlepoint, macramé, crewel and yarn kits for all uses. Does not include sewing thread (Item 72). Olefin yarn for macramé is in Miscellaneous Industrial.
- 16-18. **UNDERWEAR & NIGHTWEAR (M):**
Undershirts, shorts & briefs, pajamas, nightshirts, sleep-coats, thermal underwear, etc.
- 35-39. **UNDERWEAR, NIGHTWEAR, BRAS AND FOUNDATIONS:**
Underwear and nightwear component includes full and halfslips, panties, petticoats, pettipants, camisoles, vests, briefs and thermal underwear as well as nightgowns, pajamas, sleepcoats, peignoirs, robes, negligees and bedjackets. Also includes bodywear and all children's and infants' underwear & nightwear. **Excludes** the trim, elastic webbing, apparel lace, braid or narrow fabric used in these products.
The bras and foundations include corsets, girdles, combinations and one-piece garments, garter belts, hose supporters, two-way stretch and surgical & maternity foundation garments.
- 10,31. **ROBES & LOUNGEWEAR (MW):**
Men's & boys' beach & bathrobes, dressing gowns and smoking jackets, and women's beach & bathrobes and house-breakfast & brunch coats and dressing gowns.

54a. HIGH PILE FABRICS:

Include all applications. End uses such as coatings, collars, linings, backings and paint rollers are included. Napped or brushed fabrics such as fleeces, velvets or corduroys are excluded.

54b. FABRICS FOR LINING:

All manufactured fiber types except high pile fabrics (Item 54a), lining-type fabrics sold as retail piece goods and the lining components of shoes & slippers and luggage and handbags (Miscellaneous Other Consumer-Type). The apparel lining component of this series include main linings, interlinings, zip-in linings (except pile), pocketing and banding as well as the acetate and nylon tricot for laminating. Cotton drapery linings are not included here but are in Item 52. Also not included are interlinings of haircloth, urethane and non-woven fabrics.

43. APPAREL LACE:

Nets and veilings.

56a. NARROW FABRICS: ELASTIC AND NONELASTIC TYPES.

The "narrow woven goods" made by slicing broad woven fabrics are not included. **NARROW FABRIC** quantities for home textiles and industrial uses are shown in those sections.

RETAIL PIECE GOODS:

Are included in Topweight and Bottomweight Fabrics.

TOPWEIGHT FABRICS:

All shirts, blouses, lightweight dress and lightweight fashion fabrics. Fabrics generally weigh 5.0 ounces or less per square yard. Retail piece goods are included.

BOTTOMWEIGHT FABRICS:

Pants, jeans, sportswear, tailored clothing, coats and jackets, career apparel and heavier weight fashion fabrics. Fabrics generally weigh more than 5.0 ounces per square yard. Retail piece goods are included.

OTHER APPAREL:

Men's & women's work gloves and handkerchiefs. Manufactured fiber used for knitted accessories such as scarves, mufflers, gloves, mittens, caps, etc., is in Items 8 & 29.

NOTES FOR HOME TEXTILE ITEMS

PAGES 226-227

For all lettered and general footnotes to this table, see page 230.

HOME TEXTILES:

Data cover the use of each item not only in homes, but also in offices, hotels, institutions, etc. For certain transportation uses, note Items 50a, 63 & 64.

None of the quantities tabulated include any cotton stuffing or filling materials in items such as furniture, pillows, mattresses, comforters & quilts, sleeping bags, seat padding, etc. For the manufactured fibers, however, stuffing & fiberfill tabulated in the Industrial section. Note text on page 219 regarding the inclusion of certain manufactured fiber waste quantities here. Certain felt quantities are in Item 70.

45. BEDSPREADS:

Tailored & throw spreads, both tufted & woven, as well as the backing. **QUILTS:** Comforters and their outer shell, quilted pads are in Item 47.

46. BLANKETS & BLANKETING:

Woven, knit, needle-punched and flocked full-size and crib blankets and electric blanket shells, as well as the woven acetate or nylon filament yarn bindings thereof. Sizable quantities of rayon, acrylic, nylon & wool waste are included here.

47. SHEETS:

Pillowcases. **OTHER BEDDING:** Outside covers of quilted pads; mattress & mattress pads, civilian cots and sleeping bag shells. Mattress felts are in Item 70.

The manufactured staple quantities here are mainly polyester for sheets and rayon & polyester for bed ticking. The manufactured filament is chiefly polyester for bed ticking.

48. TOWELS & TOWELING:

Woven hand, bath, dish towels, etc. Nonwoven towels, such as "Handi-wipes" and industrial wiping cloths, are in Item 61. The large cotton waste quantity used in these products is not included.

56b. NARROW FABRICS:

Only home textiles applications. See the Apparel and Industrial sections for Narrow Fabrics in those applications.

51. CURTAINS & DRAPERY:

Lace and other types (principally woven) i.e., cafe, tiered & cottage, ruffled, shortie drapes and tailored. Also includes the backing & headers of drapery fabrics. The cotton data include cotton drapery linings. Shower curtains are in Other Home Textiles.

52. UPHOLSTERY:

Furniture slipcovers and vinyl-coated cotton fabrics for upholstery. The olefin & saran webbing for outdoor furniture is included under Narrow Woven Industrial (Item 56c).

OTHER HOME TEXTILES:

Woven & lace napery, such as tablecloths & napkins, doilies, etc., as well as the cotton in window shades. For the manufactured fibers, it includes insect screening & netting. Wall covering fabric is in Miscellaneous Industrial.

NOTES FOR FLOOR COVERING ITEMS

PAGE 227

For all lettered and general footnotes to this table, see page 230.

50. CARPETS & RUGS FACE FIBER (TOTAL):

Sum of 50a & 50b.

50a. FACE YARNS:

Tufted, woven, knitted and needle-punched types. Tufted includes broadloom & roll goods, (including carpet tiles) transportation carpet, bath mats, scatter rugs, and "grass." Woven includes carpets such as Axminster, Velvet, Wilton, etc. Knit goods are mainly scatter rugs. Needle-punched are the indoor outdoor carpets. Item 50a does not include braided, hooked or woven twisted paper

carpets.

50b. CARPET BACKING FIBERS:

The Artificial (Cellulosic) Yarn is industrial rayon used for woven carpet chain warps. The Other Yarn is olefin (monofil+film fiber+spunbonded) and small quantities of nylon & polyester filament yarn. The Other Staple is olefin only. The substantial quantities of jute used as woven primary & secondary carpet backing, as well as the jute yarn used in the warp of woven carpets, are not tabulated in Item 50b. Nor does it include the quantities of wool, hair and jute used in carpet and rug pads and cushions.

NOTES FOR INDUSTRIAL & OTHER CONSUMER -TYPE ITEMS

PAGES 228-229

For all lettered and general footnotes to this table, see page 230.

56c. NARROW FABRICS:

Woven labels, industrial webbing, shoelaces, tapes (venetian blinds & industrial), transportation seat belts, auto windlace, channeling & trim, outdoor furniture webs and zipper tapes. These figures exclude transmission & conveyor belting (in Item 67); friction tape and the braided narrow fabric used in electrical applications (in Item 69); and gummed cotton tape (in Item 76).

61. MEDICAL, SURGICAL & SANITARY:

Bandages, gauzes, adhesive tapes & plasters, sanitary napkins & tampons, cotton diapers, rayon disposable diapers, surgical gowns and packs. Medical sutures are

tabulated in Item 72. Surgical hosiery is in Items 19 & 40. Not included here is cotton waste & linters nor any nontextiles used for filling materials.

63 & 64. TRANSPORTATION FABRIC:

Auto seat upholstery & slipcovers, sidewall, headlining and sheeting. The cotton quantities include the knit and woven fabric used as the backing for vinyl sheeting. The item includes convertible auto tops & replacements thereof, as well as upholstery used in other kinds of transportation, such as airplanes, railroad & subway cars, buses, etc. It does not include seat padding, transportation rugs (in Item 50), window channeling (in Item 56c), flocking, tassels, trim, etc. The manufactured fiber used for substrates for automotive fabric is included in Item 75.

Notes for Industrial & Other Consumer-Type Items (Continued)

65. TIRES:

All types, i.e., automobile, truck, tractor, off-road, bicycle, etc. The data include tire cord & tire cord fabric, chafer and other tire components, i.e., flippers, liners, bead wrap & breaker strips.

The data include imports of tire yarn, cord & fabric and also cover any quantities subsequently exported in cord or fabric form.

The consumption of steel tire cord for the years 1986-1990 inclusive is estimated as follows: 327.0, 349.0, 393.0, 441.2 & 421.6. However, these quantities are **not included** in Item 65.

66. HOSE:

Includes wrapped, knitted, braided and woven products. Does not include braided vacuum cleaner hose.

67. BELTING:

Includes flat conveyor & transmission belts (both rubber and nonrubber, and mechanical rubber goods).

69 & 77. ELECTRICAL APPLICATIONS & REINFORCED PLASTICS:

The cotton quantities are estimated.

Electrical Applications: Electric wire insulation & covering of all kinds plus friction tape and cable wrap, stuffing & identification. The total fiber consumed does not reflect the increased use of plastic and other nonfibrous coatings, of course.

Reinforced Plastics: High-and low-pressure laminates used in the manufacture of construction materials (corrugated & flat sheet, plumbing accessories, etc.), process equipment (tanks & containers, pipes, ducts, etc.), transportation uses (aircraft, autos, trucks, etc.) and marine, missiles, molded electrical parts, housing, seating, trays, etc. Flexible laminates of cotton are tabulated by end use, e.g., vinyl-supported upholstery fabric in Item 63, etc.

70. FELTS:

Wet & dry papermakers' felts, mattress felts and cushioning & wicking felts. Apparel felts (e.g., for shirts) are classified by apparel products. Patio and similar "felts" are in Item 50a. Laundry press pads and flatwork ironer pads are in Miscellaneous Industrial. The wool quantity includes some felts used in filtration (recorded here and not in Item 71), but excludes the substantial amounts used in pressed felts.

71. FILTRATION:

Woven and nonwoven filters for wet & dry filtration, including tea bags. The small wool quantity used in the copper refining industry is included in Item 70.

The fiber used in cigarette filtration is **not included** in this end use or in the Industrial Uses totals.

72. SEWING THREAD:

Home sewing and industrial & weight goods, as well as medical sutures.

73. ROPE (Braided & twisted), CORDAGE (under 3/16"), FISHLINE, ETC:

Includes hawsers, baler or harvest twine, clothesline, tying twine, etc., as well as fishnets, seines & netting twine.

74. BAGS & BAGGING:

Manufactured Other Yarn is nylon mailbags plus olefin leno mesh & close-woven bags, including sandbags; also includes olefin bagging for wool bales. Carpet backing bale wrap is in Other Industrial.

75. COATED & PROTECTIVE FABRICS:

For the manufactured fibers, tents & tarpaulins, as well as the substrates for vinyl, rubber or urethane coating, lamination or impregnation. Examples of specific end uses covered include parachutes, deceleration chutes & tow targets, awnings, beach, garden & tractor umbrellas, inflatable dunnage & cushions, air-supported structures & automotive air-spring diaphragms and boat & pool covers.

The cotton quantities include awnings, boat covers, tarpaulins and tents. **Not included** here are the cotton quantities used for vinyl substrates; such quantities are tabulated with their appropriate end use, i.e., transportation upholstery (Items 63 & 64), upholstery (Item 52), etc. Manufactured fiber surfaces for recreational fields are not included in this survey.

76. PAPER & TAPE REINFORCING:

Gummed and pressure-sensitive tape, as well as nonwoven bonded structures for paper, tape and ribbon reinforcing.

79a. FIBERFILL, STUFFING & FLOCK:

All applications (apparel, home textiles & industrial).

Both graded fiber and waste are included. The consumption of polyester staple & tow in fiberfill for the years 1986-1990 inclusive was: 294.9, 348.6, 357.2, 349.5 & 376.3.

For the same years, use of polyester waste for stuffing and filling materials was: 60.3, 45.3, 50.1, 56.2 & 58.7.

79b. UNALLOCATED NONWOVENS:

All nonwoven quantities remaining after the identifiable nonwoven end uses, such as medical, surgical & sanitary, filtration, coated & protective fabrics, and paper & tape reinforcing, have been calculated.

MISCELLANEOUS INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS:

The cotton for abrasives, book binding, luggage & handbags, shoes & slippers, tobacco cloth, woven wiping cloths and wall-covering fabrics. For rayon, it includes asbestos carrier fiber, laundry supplies and mop yarns. For olefin yarn, it includes agricultural cloth, bale wrap, cable grading, civil engineering fabrics and macramé and other craft yarns.

TABLE 10:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1991												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1991	1990
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	123	0	38	114	80	117	151						623	470
BELGIUM	3	21	4	41	6	9	19						103	20
BRAZIL	109	164	28	109	27	27	23						487	560
CANADA	775	408	877	1147	905	740	633						5485	2666
CHILE	44	22	44	0	44	66	110						330	861
WEST GERMANY	478	633	531	493	686	421	448						3690	4283
JAPAN	111	134	114	119	142	108	177						905	754
MEXICO	150	39	118	41	79	64	136						627	670
NETHERLANDS	263	188	279	218	129	277	191						1545	2109
UNITED KINGDOM	86	0	0	35	109	38	183						451	257
ALL OTHER COUNTRIES ^a	15	35	29	2	0	26	8						115	740
TOTAL ARTIFICIAL YARN	2157	1644	2062	2319	2207	1893	2079						14361	13390
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	1339	1371	1214	396	1672	1470	1377						8839	7432
CANADA	3228	2840	3042	1843	1824	3870	3587						20234	29867
CHINA, PRC	321	0	251	211	760	0	0						1543	40
FINLAND	309	197	371	143	167	459	491						2137	2074
WEST GERMANY	515	46	0	0	0	0	262						823	1876
JAPAN	84	227	95	95	95	109	62						767	1087
TAIWAN	1336	1268	1186	1721	1148	1773	813						9245	7897
THAILAND	763	1317	232	296	513	231	220						3572	646
UNITED KINGDOM	815	438	473	128	70	21	332						2277	1417
YUGOSLAVIA	584	29	2559	636	81	239	729						4857	230
ALL OTHER COUNTRIES ^b	223	206	0	122	119	81	590						1341	2152
TOTAL ARTIFICIAL STAPLE+TOW	9517	7939	9423	5591	6449	8253	8463						55635	54718
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
BELGIUM	239	40	100	143	33	57	33						645	4573
BRAZIL	0	0	0	48	0	35	0						83	619
CANADA	2668	3903	3431	4073	5854	4970	5217						30116	27742
COSTA RICA	725	454	473	544	669	469	512						3846	3861
ECUADOR	0	34	34	15	0	0	0						83	380
FRANCE	627	705	668	841	962	1212	450						5465	9195
WEST GERMANY	1556	1449	1843	1576	1857	2178	2093						12552	13279
IRELAND	147	215	119	34	193	285	129						1122	159
ISRAEL	50	179	110	74	146	136	223						918	0
ITALY	106	109	29	38	75	73	116						546	4311
JAPAN	853	903	1401	1266	1190	894	1522						8029	4089
KOREA, REP. OF	117	59	149	5	146	45	119						640	301
MEXICO	1414	1663	1343	1620	1438	1066	1028						9572	10471
NETHERLANDS	223	258	329	284	305	416	359						2174	2091
TAIWAN	89	91	45	132	184	184	122						847	3888
THAILAND	61	67	65	95	129	63	81						561	564
UNITED KINGDOM	1740	1370	2596	1637	1678	1695	2578						13294	10673
ALL OTHER COUNTRIES ^c	75	82	58	222	104	501	630						1672	1578
TOTAL SYNTHETIC YARN	10690	11581	12793	12647	14963	14279	15212						92165	97774
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	15	25	0	12	1	3	0						56	101
AUSTRALIA	75	143	0	81	60	8	47						414	518
BRAZIL	0	110	199	87	86	0	123						605	2291
CANADA	1378	1146	968	1942	2184	2466	2427						12511	17057
FRANCE	544	417	282	421	382	323	471						2840	3545
WEST GERMANY	1136	1400	1732	1931	1558	1881	1902						11540	8581
INDIA	3008	3879	264	0	1186	646	152						9135	13091
IRELAND	0	0	0	0	357	328	660						1345	190
ITALY	176	47	80	53	203	11	48						618	1945
JAPAN	2386	2197	2080	1840	2110	2337	2270						15220	12781
KOREA, REP. OF	4958	6473	6864	5486	7279	6700	6126						43886	19548
MALAYSIA	0	95	0	48	48	44	44						279	136
MEXICO	1957	1575	1576	2743	2130	1364	2809						14154	15700
SPAIN	14	22	0	20	29	7	154						246	160
SWITZERLAND	117	285	152	127	183	363	364						1591	1487
TAIWAN	3102	1918	1891	3664	3181	2923	2864						19543	7940
TURKEY	0	0	2	111	0	151	65						329	302
UNITED KINGDOM	1848	1395	963	1630	1359	1064	1017						9276	13337
ALL OTHER COUNTRIES ^d	137	87	29	170	77	213	580						1293	1733
TOTAL SYNTHETIC STAPLE+TOW	20851	21214	17082	20366	22413	20832	22123						144881	120443

a. India 77, France 15, Italy 12, Spain 7, Taiwan 4.

b. Sweden 656, Poland 220, Turkey 219, Romania 95, Belgium 45, Spain 44, Netherlands 38, USSR 18, France 3, Italy 3.

c. Turkey 750, Australia 175, Portugal 160, Austria 83, Switzerland 82, Singapore 69, Venezuela 60, Sweden 56, Colombia 38, Peru 36, Czechoslovakia 34, Honduras 27, El Salvador 25, China, PRC 23, Hong Kong 23, Morocco 17, Denmark 6, Argentina 3, Greece 3, Finland 1, India 1.

d. Denmark 750, Israel 276, Netherlands 90, Romania 85, Hong Kong 44, Czechoslovakia 34, Belgium 6, China, PRC 5, Ecuador 3.

**TABLE 11:
U.S. MANUFACTURED FIBER IMPORTS^a
THOUSAND POUNDS**

ITEM	1991												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1991	1990
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	311	129	212	316	231	83	77						1359	1321
TEXTURED	0	0	0	0	0	0	5						5	240
OTHER	1845	1514	1847	1999	1975	1809	1996						12985	11305
MONOFILAMENTS & STRIPS	1	1	3	4	1	1	1						12	524
SUBTOTAL ABOVE	2157	1644	2062	2319	2207	1893	2079						14361	13390
STAPLE	8891	7889	9419	5533	6391	8250	8359						54732	52520
TOW	626	50	4	58	58	3	104						903	2192
TOPS	0	0	0	0	0	0	0						0	6
SUBTOTAL ABOVE	9517	7939	9423	5591	6449	8253	8463						55635	54718
WASTE	87	129	0	695	177	275	321						1684	160
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1173	2391	1704	2541	1923	1751	1450						12933	8491
TEXTURED														
UP TO 450 DENIER	198	350	232	285	478	302	535						2380	2223
OVER 450 DENIER	1197	1786	1557	1069	3421	3870	3037						15937	20082
POY	2103	1563	3032	1981	2240	2740	2969						16628	1712
OTHER	834	780	821	1828	1718	1726	2312						10019	20771
MONOFILAMENTS & STRIPS	150	72	131	131	139	51	172						846	1122
SUBTOTAL ABOVE	5655	6942	7477	7835	9919	10440	10475						58743	54401
POLYESTER														
HIGH TENACITY	785	708	651	621	671	339	340						4115	3296
TEXTURED	833	810	561	622	642	455	383						4306	6204
POY	207	172	201	246	406	300	238						1770	2886
OTHER	1548	1439	2102	1371	1486	1064	1490						10500	11129
MONOFILAMENTS & STRIPS	41	31	30	68	31	73	141						415	308
SUBTOTAL ABOVE	3414	3160	3545	2928	3236	2231	2592						21106	23823
OTHER SYNTHETIC FILAMENT														
TEXTURED	248	105	164	174	107	103	194						1095	13298
OTHER	841	804	1233	1149	1260	870	1261						7418	2118
MONOFILAMENTS & STRIPS	532	570	374	561	441	635	690						3803	4134
SUBTOTAL ABOVE	1621	1479	1771	1884	1808	1608	2145						12316	19550
STAPLE														
NYLON	1879	1788	1576	2330	2039	2057	2881						14550	22333
POLYESTER	14049	15468	11687	12879	15989	14655	14125						98852	65594
ACRYLIC	853	804	971	1640	1303	1403	1364						8338	10680
POLYPROPYLENE	134	305	363	271	156	464	1093						2786	1135
OTHER	276	229	400	211	308	204	248						1876	1616
TOW														
NYLON	591	386	240	543	533	325	564						3182	3378
POLYESTER	35	272	35	150	46	132	10						680	518
ACRYLIC	2869	1898	1768	2227	1957	1438	1649						13806	13382
OTHER	16	59	0	0	10	0	0						85	356
TOPS	149	5	42	115	72	154	189						726	1451
SUBTOTAL ABOVE	20851	21214	17082	20366	22413	20832	22123						144881	120443
WASTE														
NYLON	2030	1483	1648	1319	1611	1555	1931						11577	13659
POLYESTER	2217	1032	774	765	886	1091	905						7670	14823
OTHER	309	381	625	751	499	499	632						3696	4926
TOTAL MANUFACTURED FIBERS ABOVE	47858	45403	44407	44453	49205	48677	51666						331669	319893
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	49	163	98	125	189	90	185						899	568
SPUN YARN	579	341	416	648	575	525	800						3884	3256
SPUN YARNS														
SYNTHETIC	431	843	746	610	636	663	581						4510	16171
ARTIFICIAL	0	0	0	0	0	0	0						0	0
PUT UP FOR RETAIL SALE	67	66	58	60	91	66	28						436	139
GRAND TOTAL ABOVE	48984	46816	45725	45896	50696	50021	53260						341321	340027

SOURCE: U.S. Census Bureau Report IM145X.

a. U.S. General Imports.

**TABLE 12:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS**

ITEM	1991												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1991	1990
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	134	284	263	22	74	82	115						974	641
TEXTURED	65	44	41	198	31	159	79						617	859
OTHER	211	69	132	193	41	257	67						970	420
MONOFILAMENTS & STRIPS	2	8	42	12	6	9	24						103	161
SUBTOTAL ABOVE	412	405	478	425	152	507	285						2664	2081
STAPLE	970	779	549	710	1403	2701	1571						8683	10397
TOPS	0	15	3	0	53	103	159						333	966
SUBTOTAL ABOVE	970	794	552	710	1456	2804	1730						9016	11363
WASTE	527	666	2006	425	500	508	360						4992	3417
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	8070	7887	9547	9139	8564	5075	6075						54357	67896
TEXTURED														
UP TO 450 DENIER	1068	886	1636	1558	1172	1106	770						8196	7069
OVER 450 DENIER	4023	4917	3298	3021	2921	3681	4369						26230	30008
POY	61	102	38	66	17	21	6						311	0
OTHER	3060	2769	3549	3394	3367	4106	2555						22800	15950
MONOFILAMENTS & STRIPS	34	57	6	56	31	34	14						232	257
SUBTOTAL ABOVE	16316	16618	18074	17234	16072	14023	13789						112126	121180
POLYESTER														
HIGH TENACITY	5640	5735	5488	5274	6132	7976	5217						41462	31922
TEXTURED	5014	4345	7042	5020	6176	5011	4888						37496	23148
POY	657	685	2216	2078	1814	898	747						9095	12242
OTHER	2391	1711	2362	2654	2594	1376	2530						15618	11063
MONOFILAMENTS & STRIPS	138	80	235	349	430	363	85						1680	1144
SUBTOTAL ABOVE	13840	12556	17343	15375	17146	15624	13467						105351	79519
OTHER SYNTHETIC FILAMENT														
TEXTURED	603	627	620	473	637	420	398						3778	3727
OTHER	2963	1623	2068	2461	2088	1693	2320						15216	16632
MONOFILAMENTS & STRIPS	1050	859	1470	1062	1138	1092	1251						7922	7955
SUBTOTAL ABOVE	4616	3109	4158	3996	3863	3205	3969						26916	28314
STAPLE														
NYLON	2146	2453	1337	1768	2288	2925	1806						14723	17058
POLYESTER	6379	8388	10134	9404	10384	9044	7979						61712	50252
ACRYLIC	2431	1826	2976	2459	2082	3630	2592						17996	31601
POLYPROPYLENE	3302	1817	1957	3106	2742	2253	2680						17857	17069
OTHER	1489	1074	1811	1089	1383	682	1166						8694	9758
TOW														
NYLON	253	150	187	122	96	141	102						1051	1244
POLYESTER	58	1	32	79	47	60	14						291	561
ACRYLIC	1511	1278	855	339	328	796	439						5546	10611
OTHER	14	1	402	7	3	0	0						427	982
TOPS	11009	5452	6387	4995	10029	2354	7337						47563	28892
SUBTOTAL ABOVE	28592	22440	26078	23368	29372	21885	24115						175860	166028
WASTE														
NYLON	2788	2965	3563	2700	1549	3207	2195						18967	25733
POLYESTER	2989	5530	5263	2796	2684	1716	3340						24318	17835
OTHER	6305	6811	7387	7147	6759	8674	4910						47993	31055
TOTAL MANUFACTURED FIBERS ABOVE	77355	71894	84902	74176	79563	72153	68160						528203	488525
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	827	890	850	1560	761	905	845						6638	339
SPUN YARN	159	277	174	178	275	156	272						1491	0
SPUN YARNS														
SYNTHETIC	891	1256	1434	1865	1403	1521	1641						10011	26746
ARTIFICIAL	123	145	216	264	285	468	347						1848	0
PUT UP FOR RETAIL SALE	1488	1488	2601	2873	2730	3077	2946						17203	4546
GRAND TOTAL ABOVE	80843	75950	90177	80916	85017	78280	74211						565394	520156

SOURCE: U.S. Census Bureau Report EM522

TABLE 13:
SELECTED U.S. MONTHLY FIBER DATA
MILLION POUNDS

ITEM	1991												YEAR TO DATE ^a	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1991	1990
MANUFACTURED FIBER TOTAL SHIPMENTS ^{b,c}														
ARTIFICIAL (CELLULOSIC)														
YARN	14.8	16.4	16.2	20.3	18.0	17.7	19.0	17.4					139.8	136.7
RAYON STAPLE	20.4	16.2	22.1	21.4	25.7	22.7	24.1	24.7					177.3	207.4
TOTAL ARTIFICIAL (CELLULOSIC)	35.2	32.6	38.3	41.7	43.7	40.4	43.1	42.1					317.1	344.1
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL ^d	29.2	28.1	26.5	27.9	28.6	24.4	22.8	25.5					213.0	223.9
- CARPET	69.4	54.5	63.8	80.3	85.8	80.4	85.6	92.0					611.8	651.5
- TEXTILE	34.2	30.0	28.8	32.9	33.0	28.7	31.7	32.8					252.1	242.3
POLYESTER - INDUSTRIAL ^d	25.0	27.0	26.5	29.1	29.0	29.1	26.6	28.9					221.2	238.3
- TEXTILE ^f	67.9	61.5	64.4	75.9	74.4	68.5	75.9	74.3					562.8	498.5
OLEFIN ^g	103.4	104.4	109.4	119.2	121.1	121.1	110.5	121.0					910.1	948.7
TOTAL YARN	329.1	305.5	319.4	365.3	371.9	352.2	353.1	374.5					2771.0	2803.2
STAPLE+TOW+FIBERFILL														
NYLON	66.8	54.7	64.1	78.1	77.8	70.7	76.2	83.8					572.2	659.2
ACRYLIC+MODACRYLIC	36.5	34.8	35.5	34.2	37.5	42.0	33.1	40.0					293.6	333.9
POLYESTER	168.6	159.6	166.1	191.7	191.3	171.6	185.3	198.5					1432.7	1378.8
OLEFIN	34.7	30.9	34.6	38.5	40.7	37.5	38.0	44.0					298.9	276.6
TOTAL STAPLE	306.6	280.0	300.3	342.5	347.3	321.8	332.6	366.3					2597.4	2648.5
TOTAL SYNTHETIC (NONCELLULOSIC)	635.7	585.5	619.7	707.8	719.2	674.0	685.7	740.8					5368.4	5451.7
TOTAL MANUFACTURED FIBER	670.9	618.1	658.0	749.5	762.9	714.4	728.8	782.9					5685.5	5795.8
MANUFACTURED FIBER END-OF-MONTH STOCK														
ARTIFICIAL (CELLULOSIC)														
YARN	10.2	9.6	10.0	9.6	9.4	9.4	9.6	9.4					9.4	8.3
RAYON STAPLE	22.4	27.3	26.0	26.6	23.9	24.9	25.9	24.8					24.8	10.6
TOTAL ARTIFICIAL (CELLULOSIC)	32.6	36.9	36.0	36.2	33.3	34.3	35.5	34.2					34.2	18.9
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL ^d	25.0	23.9	24.7	26.9	26.1	28.2	30.8	29.7					29.7	36.9
- CARPET	72.0	80.6	77.6	66.3	58.5	58.4	59.9	52.1					52.1	70.2
- TEXTILE ^f	46.2	46.2	45.1	45.6	47.3	48.9	50.4	49.5					49.5	60.2
POLYESTER - INDUSTRIAL ^d	41.0	43.0	41.8	44.6	42.5	40.6	39.3	38.1					38.1	35.5
- TEXTILE ^f	86.4	93.4	93.9	90.5	90.7	91.7	92.2	86.1					86.1	91.5
OLEFIN ^g	61.5	59.7	61.1	59.8	56.4	53.3	53.4	53.7					53.7	58.6
TOTAL YARN	332.1	346.8	344.2	333.7	321.5	321.1	326.0	309.2					309.2	352.9
STAPLE+TOW+FIBERFILL														
NYLON	71.0	81.6	79.7	68.2	61.2	59.5	61.9	57.3					57.3	59.6
ACRYLIC+MODACRYLIC	73.4	72.4	67.9	72.1	74.9	70.6	78.0	79.3					79.3	86.3
POLYESTER	192.7	189.5	192.0	185.8	170.5	162.0	174.9	164.7					164.7	197.1
OLEFIN	29.8	30.0	31.5	33.3	30.1	30.1	30.2	26.0					26.0	29.6
TOTAL STAPLE	366.9	373.5	371.1	359.4	336.7	322.2	345.0	327.3					327.3	372.6
TOTAL SYNTHETIC (NONCELLULOSIC)	699.0	720.3	715.3	693.1	658.2	643.3	671.0	636.5					636.5	725.5
TOTAL MANUFACTURED FIBER	731.6	757.2	751.3	729.3	691.5	677.6	706.5	671.7					670.7	744.4
COTTON & WOOL CONSUMPTION ^g														
	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER							
RAW COTTON	1032.9		1112.0										2144.9	2060.9
APPAREL CLASS WOOL	34.6		40.5										75.1	64.1
CARPET CLASS WOOL	3.1		3.1										6.2	6.7
TOTAL RAW WOOL	37.7		43.6										81.3	70.8

- a. "Year to date" totals for stock, are the latest month's figures.
b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.
c. Producers' total domestic shipments plus export shipments.
d. Industrial is defined as 500 denier and coarser with an Instron

- tenacity of 7 grams or more per denier.
e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.
f. Includes low denier industrial yarn.
g. Cotton and Wool data for 1991 available on a quarterly basis only.